

**CARPOPHILUS FUMATUS BOH., A BEETLE NEW TO NORTH AMERICA**

(COLEOPTERA: NITUDULIDAE)

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About three years ago Carl Parsons showed me specimens of *Carpophilus fumatus* Boheman, 2 females and 2 fourth-instar larvae, collected by Al Lundy from pine cones in Orange County, Florida, May 27, 1959 and forwarded for determination by H. V. Weems, Jr. Recently, I received additional material of this species from Florida, which suggests that it is established there. The latter group of specimens, 6 males and 5 females, were collected by D. A. Miller, Plant Quarantine Division, United States Department of Agriculture, July 15, 1963 in Miami, from flowers of *Cercus* sp.

*C. fumatus* is a member of the *dimidiatus* group. It is listed in the most recent world catalogue of the family (Grouvelle, 1913, Coleopterorum Catalogus 56: 85) as a variety of *dimidiatus* (Fab.). It closely resembles *C. mutilatus* Er., so may also stand in collections under that name. Hinton (1945, Monograph of Beetles Associated With Stored Products, p. 95) recognized it as distinct from *dimidiatus*. Dobson (1954, Bul. Ent. Res. 45: 389-402) pointed out distinctive morphological features. A convenient character for distinguishing *fumatus* from others of the *dimidiatus* group was noted by Hinton (loc. cit. p. 96). This is a small but definite swelling, which he terms a gibbosity, on the inner margin of the hind femur close to the trochanter.

Information on the distribution of *fumatus* is limited. Grouvelle, (loc. cit.) listed it only from South Africa. McFarlane, J. A. (1963, Tropical Agriculture, Trinidad 40: 211-216) reported it from Jamaica, B.W.I., and I have 10 specimens collected by P. M. Schroeder, July 18, 1963, at Sabata, Ethiopia.

The majority of the members of the *dimidiatus* group are stored products pests. Dobson (loc. cit.) was not certain that *fumatus* had such a status and these North American records suggest that it may not be associated with stored materials.

—W. A. CONNELL

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**A NEW SPECIES OF ALEUROCYBOTUS**

(HOMOPTERA: ALEYRODIDAE)

The following description is presented in response to a request for a name for this injurious whitefly. A detailed treatment of the species will appear in my revision of the genus *Aleurocybotus* Quaintance and Baker.

**Aleurocybotus occiduus**, new species

Habit.—Living on leaves, stems, and spikelets.

Pupa.—Dorsum entirely colorless, yellowish, or brownish, or only subdorsum brownish. Elliptical, 1-1.50 mm long and 0.30-0.50 wide.

Margin and submargin: Marginal erenulations weak, 16-25 in 100  $\mu$ ; 2-4 mesad of each caudal seta, and a smooth, differentiated area between erenulations and median line. Submarginal ridges weak, extending to subdorsum.

Dorsal disk: Weakly sculptured by depressed lines and roughness. Submedian depressions conspicuous on abdomen, with axes of some longitudinal to median line of body. Vasiform orifice elongate triangular, 60-80  $\mu$  long and 48-60 wide; located about 4/5th its width from posterior intersegmental suture and from posterior body margin; rim not defined across anterior end, usually indicated at posterior end by a curved line; bottom extending slightly beyond posterior margin of operculum. Operculum 28-38  $\mu$  long and 40-52 wide, posterior margin straight. Cephalic, first abdominal, eighth abdominal, and caudal setae present, and a subdorsal or submarginal pair on abdominal segments 4-8. Disk pores and porettes numerous, at least 1 submedian pair on each body segment except cephalic; 13-15 submarginal pairs in  $\delta$  and 24-34 in  $\text{♀}$ .

Ventral surface: Antennae reaching just beyond base of hind legs in  $\delta$  and beyond base of middle legs in  $\text{♀}$ .

Third-stage larva.—Submedian depressions moderately defined on abdominal segments 2-7. Vasiform orifice wider in relation to length than in pupa. Disk pores and porettes present.

Second-stage larva.—Vasiform orifice as wide as long. Disk pores and porettes less numerous than in third-stage.

First-stage larva.—Eyespots present. Eighth abdominal setae cephalolaterad of vasiform orifice. Caudal furrow absent. Disk pores and porettes absent.

Adults.—In  $\delta$ , antennal segments IV, V, and base of VII subequal in length and each about 5/6th length of VI; VII with each of its 2 filaments about as long as remainder of antenna. In  $\text{♀}$ , antennal segments IV and VI subequal in length and about 1/2 length of V, base of VII about 4/5th length of VI; VII with single filament as long as III-VI combined, and 1 sensory seta (in place of 1 membranous filament of  $\delta$ ) as long as VI.

Hosts.—Gramineae: *Chloris* sp., *Cynodon dactylon* (L.) Pers., *Echinochloa crus-galli* (L.) Beauv. or *Paspalum dilatatum* Poir., *Setaria italica* (L.) Beauv., *Sorghum halepense* (L.) Pers., *S. vulgare* Pers., *S. vulgare* Pers. var. *sudanense* (Piper) Stapf, *Zea mays* L., undertermined grass. Cyperaceae: *Cyperus rotundus* L.

Distribution.—Arizona: Gila Valley, Gilbert, North Gadsden, Perryville, Yuma. California: Blythe, Calexico, Coachella Valley, Indio, La Quinta, Riverside, Seeley, Thermal.

Described from hundreds of unmounted and mounted specimens (paratypes, and holotype pupa, in U.S. National Museum Collection) from the above named plants and localities. The holotype is from *Cynodon dactylon*, Coachella Valley, Oct. 2, 1951, L. D. Anderson.—LOUISE M. RUSSELL, *Entomology Research Division, A.R.S., U.S. Department of Agriculture.*